

consideration for most advertisers and they frequently move business from one medium to another." For all of the above reasons, I have concluded that the economically relevant advertising product market includes television, radio, cable television, newspapers, Yellow Pages, direct mail, magazines, Internet, and outdoor.

B. The Geographic Market: Dade, Broward, and Palm Beach Counties.

For advertising, the relevant geographic market is quite broad.⁴³ As an initial matter, the facts demonstrate that WBZL and the Sun-Sentinel both serve Dade, Broward, and Palm Beach Counties. The map at Exhibit F shows that the Grade A contour of WBZL covers the entire Miami area and extends south to Homestead. Going north, the Grade A contour covers all of Broward County and extends well into Palm Beach County. For its part, the Sun-Sentinel and its various associated daily, Sunday, weekly and monthly publications have a circulation area that includes Dade, Broward, and Palm Beach Counties.

⁴³ In fact, the relevant market may well be national in scope. Demands for advertising time and space by national, regional, and local advertisers all press on the limited time and space that suppliers have available. As a result, these forces of demand and supply cause the various geographic areas to be interrelated. For example, a local advertiser may increase its expenditures on local newspaper advertising. This has ramifications for other newspaper advertisers. If rates rise as a result, this will cause budget reallocations to the rival media. As some money shifts to outdoor, this will influence both local and national outdoor supply. Similarly, as some advertisers turn to television and radio, this will influence both national and local suppliers of television and radio time. The logic of the interrelationships does not mean that someone who wants to sell a used car through a classified ad in the Miami Herald is apt to shift to a radio spot in St. Louis or a national spot on CBS. What it does mean, however, is that the various segments of the market are linked together and that the forces of supply and demand have wide ranging impact.

The statements provided by WBZL and the Sun-Sentinel, Exhibits C and D, also support the conclusion that the geographic market includes Dade County, Broward County, and Palm Beach County. WBZL clearly solicits advertising purchases from businesses in all three of these counties. Similarly, the Sun-Sentinel solicits advertising from businesses in all three of these counties. Moreover, the Sun-Sentinel also assigns specific personnel to cover the **news** and issues that are local and particular to Dade County, Broward County, and Palm Beach County. See Exhibit D. Logic, in addition to my economic analysis, compels the conclusion that the geographic market can be **no** smaller than the combined areas of Dade, Broward, and Palm Beach Counties.

There are several other pieces of evidence that illustrate that the geographic market is at least as large as Dade, Broward, and Palm Beach counties. First, the Grade **A** contours of WBZL (Dade) and **WFLX** (Palm Beach) overlap quite substantially. These television stations are carrying advertising messages into all three counties. **An** advertiser can use either television station to get substantial coverage of all three counties. Within this area, there are numerous television stations, cable systems, radio stations, newspapers, weeklies, shoppers, billboards, Yellow Pages, and the like that are competing for the advertising dollar. When the Sun-Sentinel, for example, competes for advertising business with the Yellow Pages, **this** influences prices and quantities in the Sun-Sentinel generally. This, in turn, **has an** impact on prices and quantities for television, radio, and cable time. The Miami Herald **has a** substantial presence in Broward County, which puts it in head-to-head competition with the Sun-Sentinel, which is in head-to-head competition with the Palm Beach Post. **As a** result,

price and quantity decisions in Dade County have a direct impact on price and quantity decisions in Palm Beach County.

The promotional materials developed by the Sun-Sentinel clearly show that it competes in Miami (Dade) and West Palm Beach (**Palm** Beach). The Sun-Sentinel's Spanish language publication, Exito, aggressively markets itself in Dade County. Exito's main offices, including its sales *staff*, are located in **Dade** County. The Sun-Sentinel has produced a marketing presentation that compares Exito's reach to that of the Hispanic radio stations in Miami. Exito's performance is also compared to that of the Hispanic television stations in South Florida. These presentations (see Exhibit G) vividly illustrate that the Sun-Sentinel is an active, aggressive competitor in all of South Florida. Thus, the Sun-Sentinel's presence links these three counties.

Scarborough data also show that **these** three counties are in the same market. Most of the major **sports** teams and major entertainment events advertise to and regularly draw from Dade, Broward, and Palm Beach Counties. For example, substantial numbers of fans from all three counties attend Dolphins football games, Miami Heat basketball **games**, and Florida Marlins baseball games.

In addition, major advertisers **seek business** from the entire Dade-Broward-Palm Beach area. Car **dealers** such as Mullinax Ford (in north Broward) and Kendall Toyota (in south Dade) draw customers from and advertise in all **three** counties. Tourist attractions such

as Grand Prix Race-A-Rama (Dade) and Rapids Water Park (West Palm Beach) also advertise in all three counties. These **firms** are competing in the three counties and buying advertising time and/or space in all three.

Thus, these three counties -- Dade, Broward, and Palm Beach -- are inextricably linked together in a market. It would make **no** sense to sub-divide this area. To do **so** would be inconsistent with economic reality.

C. The Analysis Of The Market.

The various sources and amounts of advertising for Dade, Broward and Palm Beach counties, along with the percentage **share** held **by** WBZL and the Sun-Sentinel publications, are displayed in Exhibits H and I." The information reflected in these exhibits was compiled from an array of sources under my supervision and at my request. In addition, specific competitors were identified and estimates of their market **shares** were made. **These** efforts resulted in data that I used to evaluate the competitive significance of the proposed cross-ownership of **WBZL** and the Sun-Sentinel in 1996. Although **these data** were prepared earlier, I **am** unaware **of** any substantive changes in the Dade-Broward-Palm Beach County area that would alter my analysis. In particular, I have no reason to suppose that the "■ calculations would change in a material fashion.

⁴⁴ Exhibit I **has** been provided **only** as an accommodation to the FCC's decision in the Disney/CapCities case, which inexplicably focused on an advertising product market **that only** included television, radio, cable television, and **newspapers**. In my opinion, **there** is no valid economic basis to support this product market definition.

I received reliable estimates of the market shares of competing television stations, radio stations, daily newspapers, cable systems, and yellow pages. I treated all radio stations with common ownership as a single entity. Cable television systems were treated similarly. The estimate of total advertising revenue of the non-daily newspapers was allocated on the basis of each newspaper's circulation. The direct mail suppliers are highly diffused, but I had specific estimates for Advo and Harte Hanks. In order to be conservative, I assumed that the remaining firms were just a bit smaller than Harte Hanks. I had no firm-specific data on outdoor advertising, so I treated outdoor as a single entity. Similar treatment was accorded to the interactive revenue. Thus, in every instance, I made assumptions that biased the HHI upward.

Nonetheless, concentration in the South Florida market is still low; market shares are not very large and there are a substantial number of competitors in the market. I have calculated HHIs for four different possible definitions of the relevant market. First, defining the product market as television, radio, cable television, newspapers, yellow pages, direct mail, magazines, outdoor, and interactive advertising and the geographic market as Dade, Broward, and Palm Beach Counties, the pre-merger HHI was 841. According to the Merger Guidelines, the antitrust enforcement agencies consider such markets to be unconcentrated and ordinarily do no further analysis. Cross-ownership of WBZL and the Sun-Sentinel increased the HHI by 40 to 881, which is still in the unconcentrated range. Thus, for the agencies charged with protecting competition, cross-ownership would not trigger any

concern. Moreover, the combined market share of WBZL and the ~~Sun-Sentinel~~ is less than 14 percent.

Second, using the same product market, but eliminating Palm Beach County from the geographic market, the pre-merger **HHI** was **994**, which is still unconcentrated. The combined market share ~~of~~ WBZL and the ~~Sun-Sentinel~~ is **14.7** percent, which is too small to confer any market power. Cross-ownership of WBZL and the ~~Sun-Sentinel~~ increased the **HHI** by **54** to 1048. Technically, this puts the market into the moderately concentrated range, but **as** the Merger Guidelines explain, the enforcement agencies recognize that the thresholds are not as precise as they appear. **As** a result, "[o]ther things being equal, cases falling just above and just below a threshold present comparable competitive issues." Moreover, **as** the Merger Guidelines indicate, the enforcement agencies ordinarily will be unconcerned with an **HHI** of 1048 and a change of only 54. The market is still largely unconcentrated and the change is so small that no market power could result from the proposed combination.

Third, based on a product market consisting of radio, television, cable television, and newspaper advertising, I examined the **HHI** for Dade, Broward, and Palm Beach Counties. **In this case**, the pre-merger **HHI** was 832. Cross-ownership of WBZL and the ~~Sun-Sentinel~~ increased the **HHI** by **80** to 912. **The** combined market ~~share~~ of WBZL and the ~~Sun-Sentinel~~ is 18.9 percent, **which** is too small to ~~confer~~ any market power. **Thus**, the market remains unconcentrated and ~~of~~ no competitive concern **to** the agencies charged with antitrust enforcement.

Finally, I used the more limited product market and reduced the geographic market to include only Dade and Broward Counties, even though this market does not in either respect reflect the proper market for analysis. For this market, the pre-merger HHI still was only 1098, which is just barely in the moderately concentrated range. Cross-ownership of WBZL and the ~~Sun-Sentinel~~ increased the HHI in this most narrowly defined market by 106 to 1205. In this case, the combined market share of WBZL and the ~~Sun-Sentinel~~ is still only 19.8 percent, which is not sufficiently large in this market to confer market power.

Even in this case, competitive concerns should not be triggered under the Merger Guidelines. Section 2.0 of the Guidelines explicitly recognizes that "market share concentration data provide only the starting point for analyzing the competitive impact of a merger." For a number of reasons, the factors set forth in Sections 2 through 5 of the Guidelines reveal that there is, in fact, no competitive concern in the present case.

First, Section 2.0 points out that the smaller the percentage of total supply that a firm controls, the more severely it must restrict its own output in order to produce a given price increase, and the less likely it is that an output restriction will be profitable. In this instance, the combined market share of WBZL and the ~~Sun-Sentinel~~ is only 19.8 percent, which is well below 30 percent that the Supreme Court found insufficient to confer market power in ~~Hyde~~. This share is far too small to pose an anticompetitive threat. If WBZL and the ~~Sun-Sentinel~~ restricted output and no one else did anything, it would lose the profit on the sales not made while the benefit of the resulting price increase would be diffused throughout

the market for advertising time and space. Thus, WBZL and the ~~Sun-Sentinel~~ would bear all of the costs of restricting output but receive only a portion (about 19.8 percent) of the **benefits**. Moreover, it is unlikely that rivals would do nothing. Advertisers could turn to other television stations (many with higher ratings), cable television, radio, and other newspapers (the **Miami Herald**, for example, which has a more substantial presence) in the market. These rivals would benefit by soliciting the former customers of WBZL and the ~~Sun-Sentinel~~.

Second, Section **2.1** points out that when the DOJ and the ~~FTC~~ examine the potential for coordinated behavior, they "examine the extent to which post-merger market conditions are conducive to reaching terms of coordination, detecting deviations from those terms, and punishing such deviations." One should not underestimate the complexity of reaching any agreement among the market participants. There are still seven other English language television stations, more than 18 radio groups, 20 cable systems groups, and three other daily newspapers serving Dade and Broward Counties. In addition, these firms do not supply a homogeneous product. Differences across products make agreement on terms complicated because prices have to change by varying amounts. Product heterogeneity is specifically recognized in the Guidelines (Section **2.11**) **as** a factor that impedes successful coordination.

Third, the ability of other firms to adjust capacity in ~~the~~ event of an **output** restriction by the merged ~~firm~~ is also recognized **as a** limiting characteristic (Section **2.22**). Rival newspapers can adjust the space available for advertising almost instantly through

decision on the number of pages to print and how much news to include. Consequently, the elasticity of supply is very high and, therefore, market power is low.

Fourth, one must also remember that there are a variety of substitutes that have been omitted from the product market definition: yellow pages, outdoor, direct mail, the Internet, and magazines. In many cases, a ready substitute for an advertising insert in the newspaper is direct mail. Outdoor and magazines provide a substitute for television advertising of branded products such as automobiles. By eliminating some of these substitute media from the product market, **we** have increased the demand elasticity for the media that were included. The result is a reduction in the ability to behave noncompetitively.

Fifth, the Guidelines specifically recognize that mergers may result in efficiencies that are procompetitive (Section **4**). The cross-ownership of **WBZL** and the ~~Sun-~~ **Sentinel** will create efficiencies that ~~permit~~ expanded local news programming on WBZL. This is clearly beneficial to consumers and, therefore, is deemed **procompetitive**.

For all these reasons, cross-ownership of WBZL and the ~~Sun-Sentinel~~ would not appear to pose any competitive risks.

IV. Diversity in Video Programming.

The FCC has long justified its regulation of broadcast and broadcast station ownership on the theory that there is scarcity in the number of available stations on the airwaves and that as a result of this scarcity, market forces will not ensure that programming is diverse. Precisely what is meant by diversity is somewhat elusive. The FCC has traditionally focused upon "the ability of broadcast and non-broadcast media to advance" three different types of diversity: viewpoint diversity, outlet diversity, and source diversity." Since the FCC's articulated concern with diversity is focused on the interests of the viewership, the most important diversity concept in this context appears to be viewpoint diversity. Viewpoint diversity refers to "helping to ensure that the material presented by the media reflect a wide range of diverse and antagonistic opinions and interpretations."

A. A Competitive Market Will Result In A Diversity Of Viewpoint.

A competitive market for video programming will result in diversity of both programming and viewpoint without the need for governmental intervention. Under basic principles of economics, a competitive market will result in product differentiation. Where there are numerous participants in a given market, the entrants will act rationally to maximize their profits by differentiating themselves from the incumbents. As applied to a market for

⁴⁵ In the Matter of 1998 Biennial Regulatory Review -- Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, Notice of Inquiry, FCC 98-37 (Mar. 13, 1998), ¶ 6.

shares of the viewing public, the rational supplier of video programming will "differentiate" its product. *i.e.*, vary its programming or viewpoint, so as to capture the largest possible share of the audience. This strategy makes economic sense because larger audience shares mean larger advertising revenues.

The primary economic prerequisite for full product differentiation is having enough rival suppliers so that it is profitable to pursue each market segment. **In** other words, once the number of suppliers reaches a critical mass, it will be economically rational for some of them to serve niche or small market segments, resulting in a mature market with all profitable market segments served.

Just as competition in a mature market will generally result in product differentiation, a mature market for video programming will result in both viewpoint and programming diversity. A simple hypothetical will demonstrate this point. Suppose that at four o'clock in the afternoon, 90 percent of television viewers prefer to watch soap operas, and 10 percent prefer to watch other types of programming. Acting rationally, the first nine ~~entrants~~ into the market will ~~compete~~ for the 90 percent soap opera market, leaving 10 percent of the viewers unserved. **As** there ~~are~~ new ~~entrants~~ into the market, however, programming will be aimed at ~~the~~ smaller, remaining market shares until it is no longer profitable to do **so**. In this **sense**, technological developments in ~~the~~ market for video programming **can** make (and, **as** shown below, have made) the video programming market sufficiently competitive to result in diversity of programming and viewpoint. Sufficient growth in the avenues for supply of

video programming will eliminate any functional scarcity in that market and competitive forces will necessarily result in the diversity sought by the FCC.⁴⁶

The FCC and the Department of Justice obviously agree with this view of competition in the video programming market because they use the HHI in deciding whether markets (including the video programming market) should be regulated. As discussed above, the HHI is simply a measure of the concentration in a market. And where the market is unconcentrated as measured by the HHI, the FCC and the Department of Justice assume that competitive forces will ensure that all segments of the market are served, i.e., that program and viewpoint diversity will be achieved.

B. Competition And Diversity Are Resent Regardless Of What Market Is Used To Analyze The Common-Ownership Of The Sun-Sentinel And WBZL.

1. The National Market

Since 1969, broadcast television has expanded significantly and ~~has~~ become less Scarce than at any time in the past. The national market for video programming is competitive and diverse. Given the number of broadcast opportunities available nationwide (Le. UHF and VHF stations), there is ~~no~~ functional scarcity in that market and diversity is preserved.

⁴⁶ The use of the term “scarcity” is somewhat misleading in this context. As a technical economic matter, scarcity exists in any market where there is not an infinite supply. For example, there is Scarcity in the salt market. Clearly, therefore, the technical definition of scarcity is not a meaningful one for purposes of justifying FCC regulations, since it could be applied to markets that are regulated much less intrusively, most notably the cable industry.

Furthermore, for purposes of evaluating whether there is "scarcity" in the broadcast market, one must consider not only the availability of broadcast, but also the availability of competing technologies such as cable, **MDS**, SMATV, VCR, low power television, HSD and DBS. For purposes of determining the level of competition in a particular market, a market is defined as the particular product (broadcast television) and all reasonable substitutes for it. When all of these technologies are taken into account, it is clear that there is no scarcity of opportunity to present video programming. Indeed, according to the FCC's Policy and Rules Division's Overview of the Television Industry, in 1990, the HHI for the television industry was **187**, making it an extremely unconcentrated market. With such a low HHI, one can confidently state as an economic matter that programmers are competing for virtually every available market segment.

A simple review of the myriad offerings on television, cable and related services demonstrates this point. It is hard to imagine a program format that anyone will watch that is not available. In Miami, for example, there is a large Hispanic population and we find Spanish language programming. In Honolulu, there is Japanese language programming. **As** tastes and interests vary from one locale to another, the programming responds. But the current array of programs is what the market dictates should be provided."

⁴⁷ This is not to say that there is "enough" of certain types of programs that some deem more worthy than others of being aired.

2. The South Florida Market

The South Florida market is also extremely competitive and provides viewers with a wide array of programming. One study indicates that ~~the~~ all daypart HHI for Miami is in ~~the~~ unconcentrated range. In re Review of the Prime Time Access Rule, 11 FCC Red 546 (1995) Table D-1. For purposes of illustrating ~~the~~ range of viewing options available in this market, in Exhibit J, I have attached an annotated program grid for Miami for Tuesday, July 23, 1996. at 6:00 p.m. The grid reveals an impressive array of programming available. During this time slot, there were the following numbers of program types:

<u>Program</u>	<u>Number</u>
News - English	8
News - Spanish	1
Religious	1
Movies	6
Sports	4
Children's	2
Sitcom	4
Computer	1
Teen	1
Action/Crime Drama	6
Business News	1
Music	3
Comedy	2
Game	1

In just this one ~~time~~ slot, there were **14** different types of programs and **43** different programs.

Again, as this example illustrates, if ~~the~~ demand exists, ~~the~~ program will be provided.

C. The Cross-Ownership ~~Of~~ WBZL And The Sun-Sentinel Will Not Have Any Negative Impact ~~On~~ Diversity.

The belief that diversification of ownership will increase content diversity ~~rests~~ ~~on~~ the assumption that the owner of multiple outlets will cause each of those outlets to present information, viewpoints, and entertainment that reflects the owner's own political and artistic philosophy. This assumption is unjustified. Video programmers (and other information service providers) are in the business of supplying material that meets the public's demand for information and entertainment. Economic self-interest compels a group owner (like any owner) to target its programming at the audience shares present in its market. Any other approach would require the group owner to subsidize its programming or fail commercially.

~~As~~ an economic matter, therefore, there is ~~no~~ reason to suppose that the cross-ownership of ~~WBZL~~ and the Sun-Sentinel reduces diversity. Tribune may decide to change WBZL's programming if it can improve profits by doing ~~so~~. If WBZL was behaving in an optimal fashion, the acquisition would not lead to wholesale changes because this would reduce profits. There are indications, however, that Tribune will make ~~some~~ programming changes that will result in a net increase in news and public service programming.

~~In~~ addition, there are efficiencies associated with the cross-ownership of media outlets. ~~As~~ demonstrated ~~in~~ Tribune's ~~Comments~~ in response to the ~~NOI~~, ~~this~~ may allow the cross-owner to produce more news and public interest programming since those programs ~~can~~ be more efficiently produced by the cross-owner. In fact, ~~the~~ FCC staff found "that ~~on~~

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average, co-located, newspaper-owned TV stations programmed 6% more local news, 9% more local non-entertainment, and 12% more total local including entertainment than do other TV stations."⁴⁸

There are a number of decisions of the FCC that have recognized that the substantial cost savings enable the common owner to provide more local programming and other public interest benefits that are less profitable than network/syndicated programming. For example, in US Radio Stations, L.P., 11 FCC Rcd. 5772 (1996), the FCC noted that common ownership of a television station and two radio stations in the Little Rock, Arkansas DMA would result in savings in excess of \$850,000 during the first year and over \$250,000 in succeeding years, allowing the television station to initiate local news programming during a time slot in which no other station provided news and to increase radio station news programming by drawing on public affairs resources at the television station. There are many similar examples. See, e.g., New Mountain Broadcasting II Corp., 11 FCC Rcd. 2344 (1996) (\$3 million in cost savings from co-ownership of a television station and two radio stations allowing increased news, weather, and live local coverage throughout the state). These examples suggest that the co-owner will in many circumstances add to the diversity of programming available rather than diminish it.

⁴⁸ See Second Report and Order, 50 F.C.C.2d 1046, 1094, Appendix C (1975).

An Economic Analysis of the
Cross-Ownership of WBZL and
the Sun-Sentinel

Exhibit List

Exhibit A	-	Credentials
Exhibit B	-	Radio Advertising Bureau materials
Exhibit C	-	Declaration of Harvey Cohen
Exhibit D	-	Declaration of James Smith
Exhibit E	-	Sun-Sentinel Promotional Materials
Exhibit F		Map of WBZL Grade A Contour
Exhibit G		Sun-Sentinel Promotional Materials
Exhibit H	-	Advertising Revenue by Category (Broad Product Market)
Exhibit I	-	Advertising Revenue by Category (Narrow Product Market)
Exhibit J		Program Grids

EXHIBIT A
CREDENTIALS

Exhibit A

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Post Graduate: Regulated Public Utilities
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Major Fields: Industrial Organization and Public Policy
Antitrust Economics
Applied Microeconomic Theory

Dissertation: 'Inferior Inputs and External Effects.'
Supervisor: C. E. Ferguson

Work Experience: Military:

Management Analyst. U.S. Army. Army Materiel Command, Aberdeen
Proving Ground, 1968-69 (rank: 1 Lt.).

Procurement Officer, U.S. Army, USARV Central Purchasing Agency,
1969-70 (rank: CPT.).

Academic: Assistant Professor, University of Florida, September **1970** to **June 1974**.
Associate Professor, University of Florida, July **1974** to June **1978**.
Professor, University of Florida, July **1978** to present.
Huber Hunt Professor of Business and Legal Studies, July **1990** to present.
Visiting Scholar in Residence. Center for the Study of American Business,
Washington University. September **1977** to June **1978**.
Visiting Professor, University of Hawaii, Fall **1980**, **Summer 1991**.
Summer **1992**.
Visiting Professor, University of California-Berkeley, Winter and Spring
1981.

Administrative: Chairman, Department of Economics, University of Florida: September
1976 to July **1977**, July **1981** to January **1983**, May **1984** to September
1986. and August **1989** to June **1991**.
Associate Director. Public Policy Research Center, University of Florida:
January **1978** to July **1992**.

Other: Member, Research Team, Academic Task Force for Review of the
Insurance and Tort Systems, **1987**.
Member, **Antitrust Committee, Agency** for Health Care Administration,
1993.
Member, **Task Force on** Legislation and Regulation. **ABA** Antitrust Section
Committee on Franchising, **1994**.

Professional Memberships

American Bar Association
American Economics Association
American Law and Economics Association
Industrial Organization Society
International Law and Economics Association
Society of Franchising
Southern Economic Association
Western Economic Association

Publications

1. "Inferior Factors, Externalities, and Pareto Optimality," Quarterly Review of Economics and Business, Fall 1971, Vol. 11, 17-25. coauthored with C.E. Ferguson.
2. "Some Legal and Economic Aspects of Pollution: The Automobile, A Case in Point," Florida Law Review, Summer 1972, Vol. 24, 399-409, coauthored with R.F. Lanzillotti.
3. "The Sherman Act and the Incentive to Collude," The Antitrust Bulletin, Summer 1972. Vol. 17, 433-444.
4. "Problems of Pollution Standards: The Clean Air Act of 1970." Land Economics, August 1973. Vol. 49, 260-268.
5. "Automobile Pollution, Externalities and Public Policy," The Antitrust Bulletin, Fall 1973, Vol. 18, 431-447, coauthored with R.F. Lamillotti.
6. "Heroin Addiction and Urban Crime," Public Finance Quarterly, October 1973. Vol. 1, 457-466, coauthored with R.J. Vogel.
7. "Reciprocity: A Reconciliation of Conflicting Views," Antitrust Law and Economic Review, Vol. 6, No. 3 (1973). 77-86.
8. "Economies and Diseconomies of Scale in Administering Health Insurance," Proceedings of the American Statistical Association: Business and Economic Section, 1973. coauthored with R.J. Vogel.
9. "Random Input Prices and the Theory of the Firm," Economic Inquiry, June 1974, Vol. 12, 214-226.

10. "Estimation of the Elasticity of Substitution when Input Prices are Random," **Southern Economic**, July 1974, Vol. 41, 141-144.
11. "Estimation of Elasticity of Substitution in American Manufacturing Industry from Pooled Cross-section and Time-Series Observations," **The Review of Economics and Statistics**, August 1974, Vol. 56, 343-347, coauthored with John Kraft.
12. "An Analysis of Medicare Administrative Costs," **Social Security Bulletin**, August 1974, Vol. 37, 3-23, coauthored with R.J. Vogel.
13. "Export Promotion under Imperfect Competition: Devaluation and Subsidization," **Economic Notes**, Vol. 3 (December 1974), 103-114, coauthored with David Geithman.
14. "Blue Cross-Blue Shield Administrative Costs: A Study of Non-Profit Health Insurers," **Economic Inquiry**, Vol. 13 (June 1975), 237-251, coauthored with P. Ginsburg and R.J. Vogel.
15. Review of **Optimal Planning for Economic Stabilization** by Robert S. Pindyck in **Interfaces**, Vol. 5 (August 1975), 103-104.
16. "The Literature on Incentives," Chapter 2 in **The Geographic Distribution of Nurses and Public Policy**, USDHEW Publication No. (HRA) 75-53, 1975, coauthored with David Kaserman and Frank Sloan.
17. "Nonnative Measures of Nurse Distribution: A Review of the Literature," Chapter 3 in **The Geographic Distribution of Nurses and Public Policy**, USDHEW Publication No. (HRA) 7553, 1975.
18. "Economies of Scale in the Administration of Health Insurance," **Review of Economics and Statistics**, Vol. 57, May 1975, 185-189, coauthored with J.R. Jackson and R.J. Vogel.
19. "A Note on the Influence of Uncertainty in Estimation of Production Function Models," **Journal of Econometrics**, Vol. 3 (November 1975), 391-394, coauthored with Rafael Lusky.
20. **The Costs of Health Insurance Administration**, Lexington, Mass: D.C. Heath, 1975, coauthored with Ronald J. Vogel.
21. **Health Insurance Administrative Costs**, USDHEW Publication No. (SSA) 76-11856, 1975, coauthored with Ronald J. Vogel.

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22. "Reciprocity in an Uncertain Environment," The Antitrust Bulletin , Summer 1976, Vol. 21, 271-293.
 23. "Regional Considerations of the Clean Air Act," Growth and Change, Vol. 7 (October 1976). 3-7, coauthored with J. Fesmire and D. Kaserman.
 24. "Market Structure and Costs: ~~An Explanation~~ of the Behavior of the Antitrust Authorities," Antitrust Bulletin , ~~Winter~~ 1976. Vol. 21, 691-702, coauthored with David Kaserman.
 25. "A Note on Random Demand and Duality under Competition," International Economic Review, February 1977, Vol. 18, 235-240, coauthored with Rafael Lusky.
 26. "The Cost of Administering Medicare," The Quarterly Review of Economics and Business, Vol. 17 (Summer 1977), 67-77. coauthored with Ronald J. Vogel.
 27. "The Impact of Uncertainty upon the Multiproduct Firm." Southern Economic Journal, July 1977, Vol. 44. 136-142, coauthored with Arnold Heggstad.
 28. "Price Discrimination under Uncertainty," in Natural Resources, Uncertainty, and General Equilibrium Systems: Essays in Memory of Rafael Lusky, Academic Press, 1977, coauthored with Arnold Heggstad.
 29. "Private Brands and Antitrust Policy," UCLA Law Review , Vol. 25, October 1977, 46-69, coauthored with Yoram Peles.
 30. "Some Remarks on Recent Merger Decisions," Industrial Organization Review , Vol. 5, 1977, 109-114, coauthored with Arnold Heggstad.
 31. "Bank Portfolio Regulation and the Probability of Bank Failure," Journal of Money, Credit and Banking, Vol. 10, February 1978, 88-93, coauthored with Arnold Heggstad.
 32. "Uncertainty and the Incentive for Vertical Integration," Southern Economic Journal, Vol. 45. July 1978, 266-272, coauthored with David Kasennan.
 33. "Random Prices and Estimation of the Elasticity of Substitution," Atlantic Economic Journal, Vol. 6 (July 1978), 75-78.
 34. "A Survivor Analysis of Commercial Health Insurers," Journal of Business , Vol. 51, July 1978, 521-530, coauthored with R.J. Vogel.

35. "Vertical Integration. Tying, and Antitrust Policy," American Economic Review , Vol. 68, June 1978, 397-402, coauthored with David Kaserman.
36. "The Prudent Man Rule and the Conservation of Trust Principal," University of Illinois Law Forum, Vol. 1978, 79-101, coauthored with Arnold Heggestad.
37. "Commentary" in R.F. Lanzillotti, ed., Economic Effects of Government Mandated Costs, Gainesville, Fla.: University of Florida Press, 1979.
38. "Durability, Market Structure and Antitrust Policy," Antitrust Bulletin , Vol. 24, Summer 1979, 321-336, coauthored with Rafael Lusky.
39. "ERISA and the Prudent Man Rule: Avoiding Perverse Results," Sloan Management Review, Vol. 20, Winter 1979, 15-25.
40. "Random Demand, Price Discrimination. and the Cost Justification Defense in Robinson-Pam Cases," Industrial Organization Review , Vol. 6, 1978, 120-130.
41. "ERISA and the Prudent Man Rule: Avoiding Perverse Results," in LEXICONICS: The Interaction of Law and Economics, 1980.
42. Regulating the Professions: A Public Policy Symposium, coedited with Stephen Rubin, Lexington, Mass: D.C. Heath, 1980.
43. "Preservation of Quality and Sanctions Within the Professions," coauthored with David Kaserman, in 42.
44. "Antitrust Penalties: Deterrence and Compensation," , Vol. 1980, No. 1, 1980, 51-72.
45. "Vertical Control with Variable Proportions: Ownership Integration and Contractual Equivalents," Southern Economic Journal , Vol. 46 (April 1980). 1118-1128, coauthored with David Kaserman.
46. The Conglomerate Corporation: A Law and Economics Symposium, coedited with R.P. Lanzillotti, Boston: Oelgeschlager, Gunn, and Hain, Inc., 1981.
47. "Conglomerate Mergers: Efficiency Considerations." coauthored with Yoram C. Peles, in 46 above.
48. "Separation of Ownership and Control in the Modern Corporation: Antitrust Implications," Journal of Business Research , Vol. 11 (1983). 333-343, coauthored with David Kaserman.

49. Microeconomics for Managerial Decision Making, New York: McGraw-Hill, 1982, coauthored with Lawrence Kenny. Spanish translation - 1983.
50. "The Albrecht Rule and Consumer Welfare: An Economic Analysis," Florida Law Review, Vol. 33 (Summer 1981), 461-484, coauthored with David Kaserman; reprint in Journal of Reprints for Antitrust Law & Economics Vol. ____ (199__).
51. "Franchising: Monopoly by Contract — Comment," Southern Economic Journal, (April 1982). 1074-1079, coauthored with David Kaserman.
52. "The Scope of Regulation in the Competitive Telephone Equipment Market," Public Utilities Fortnightly, Vol. 108 (December 17, 1981), 29-34.
53. "Optimal Franchising," Southern Economic Journal, Vol. 49 (October 1982). 494-505, coauthored with David Kaserman.
54. "A Note on Dual Input Monopoly and Tying," Economics Letters, Vol. 10 (1982), 145-152, coauthored with David Kaserman.
55. "Automatic Fuel Adjustment Clauses: The Issues and the Evidence," Public Utilities Fortnightly, Vol. 110 (November 25, 1982), 27-32, coauthored with David Kaserman.
56. "Umbrella Pricing and Antitrust Standing: An Economic Analysis," Utah Law Review, Vol. 1982 (No. 4, 1982). 763-796, coauthored with Virginia Maurer; reprinted in Journal of Reprints for Antitrust Law & Economics, Vol. 25 (1995).
57. The Law and Economics of Vertical Integration and Control, New York: Academic Press, 1983. coauthored with David Kaserman.
58. Antitrust Economics, Richard D. Irwin, 1985, coauthored with David Kaserman.
59. "Tying Arrangements and Uncertainty" Research in Finance, Supplement 1, 1984 Management Under Government Intervention: A View From Mount Scopus, 1-14. coauthored with David Kaserman.
60. "The Individual Coercion Doctrine and Tying Arrangements: An Economic Analysis," Florida State University Law Review, Vol. 10 (Winter 1983), 531-568, coauthored with Jeffrey Finci.
61. "A Suggestion For Improved Antitrust Enforcement," Antitrust Bulletin, Vol. 30 (Summer 1985), 433-456.